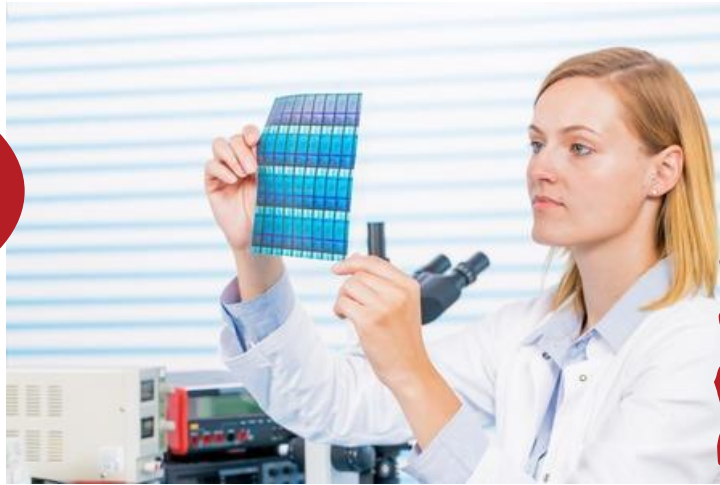


## Target Group:



## Occupational Profile

# Biomedical Engineer

Standard Occupational Code 17-2031.00

## What They Do

Apply knowledge of engineering, biology, and biomechanical principles to the design, development, and evaluation of biological and health systems and products, such as artificial organs, prostheses, instrumentation, medical information systems, and health management and care delivery systems.

## Is This For You?

**Work Interests** are described in the following categories (compatible with Holland's Model). People who tend to succeed in this career are:

**Investigative** – involve working with ideas, and require an extensive amount of thinking. Involve searching for facts and figuring out problems mentally.

**Realistic** – involve work activities that include practical, hands-on problems and solutions.

**Work Values** are aspects of work that are satisfying to you. The following work values are generally associated with this career:

**Working Conditions** – offer job security and good working conditions.

**Achievement** – results oriented and allow employees to use their strongest abilities, giving them a feeling of accomplishment.

**Independence** – allow employees to use their strongest abilities, giving them a feeling of accomplishment..

**Abilities** reflect a person's aptitude to acquire skills and knowledge. The following abilities are important for success in the career:

- Deductive Reasoning
- Inductive Reasoning
- Near Vision
- Problem Sensitivity
- Written and Oral Comprehension

## Skills You Need

- Critical Thinking
- Science
- Mathematics
- Judgement and Decision Making
- Complex Problem Solving

## Education & Training

Biomedical Engineers need **at least a bachelor's degree in biomedical engineering or a related program**. Biomedical engineers are required to be licensed by the South Dakota Board of Technical Professions.

## Requirements for the National Career Readiness Certificate (NCRC)

	Median Skill Level
Applied Mathematics	7
Reading for Information	7
Locating Information	5

## Where They Work

Industries which employ the largest number of biomedical engineers are:

- Manufacturing Companies
- Universities
- Hospitals
- Research Facilities of Companies and Educational and Medical Institutions
- Government Regulatory Agencies

## Employment & Wages\*

2014 Workers	2024 Workers	Numeric Change	Percent Change	Median Annual Wage
XX	XX	NA	XX	\$86,220

## Additional References

Labor Market Information Center

[www.dlr.gov/mic](http://www.dlr.gov/mic)

Career OneStop

[www.careeronestop.org](http://www.careeronestop.org)

O\*Net Online

[www.onetcenter.org](http://www.onetcenter.org)

mySkills myFuture

[www.myskillsmyfuture.org](http://www.myskillsmyfuture.org)

## Provided By

Labor Market Information Center  
South Dakota Dept. of Labor Regulation  
605.626.2314

Visit [www.dlr.gov/mic](http://www.dlr.gov/mic) and choose Career Exploration & Planning from the left-hand menu, then Hot Careers to obtain most recent workforce data and trends and more resources, including this document. Also available are explanations of the terms used in the work interests, work values, abilities and skills sections of this occupational profile.

Updated March 2017.